**Heat and Temperature Review Part 1**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Here is a little review of some of the important points from heat and temperature unit

1. Heat is not temperature and temperature is not heat.

What is Heat?

What is Temperature?

1. One way to estimate temperature is to touch something. However, our sense can be fooled. We can use thermometers to measure temperature. We learned of two temperature scales (Celsius and Kelvin)
2. What is the Celsius based on?
3. At what temperature does water freeze at on the Celsius scale?
4. What temperature does water freeze at on the Kelvin scale?
5. What temperature (in degrees Celsius) does pure water boil at when it is at sea level?
6. What temperature does water at sea level boil at on the Kelvin scale?
7. At what temperature in degrees Celsius does water boil at in Alberta? (remember your lab you worked on)
8. At what temperature in degrees Kelvin does water boil at in Alberta? Why is it different than at sea level?
9. What are two ways to change the boiling point of water?
10. When an impurity such as salt is added to ice, what happens to the temperature?
11. When an impurity such as salt is added to water and brought to a boil, what happens to the boiling point of water?
12. What do we believe happens at absolute zero?
13. Thermostats are controlled by bimetallic strips. Draw a diagram of a bimetallic strip before it is heated and after it is heated. Be sure to explain what happens to the bimetallic strip when it is heated. (Please label the faster expanding metal, slower expanding metal, and heat source)
14. In the winter, how could you identify air leaks around doors and windows from an infrared image?
15. Please use the chart to explain the Particle Model Theory

|  |  |  |  |
| --- | --- | --- | --- |
| State of Matter | S\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_qu\_\_\_\_\_\_ | \_\_\_ \_\_\_ S |
| Draw how particles are organized in each state |  |  |  |
| Describe the motion of particles in each state |  |  |  |
| Describe the relative amount of space between particles in each state |  |  |  |
| Describe the amount of shape of each state |  |  |  |
| Describe the volume of each state |  |  |  |